



GROUP	MODEL
Emissions Service Campaign	2017-2019MY Soul (PS) w/Nu 2.0L GDI SULEV
NUMBER	DATE
SC251	January 2023

VOLUNTARY EMISSIONS SERVICE CAMPAIGN

NU 2.0L GDI SULEV ECU EMISSIONS LOGIC IMPROVEMENT (SC251)

SUBJECT:

This bulletin provides the procedure to update the emissions-related logic of the Electronic Control Module (ECM) with an improved version on certain 2017-2019MY Soul (PS) vehicles equipped with the Nu 2.0L GDI SULEV engine, produced from July 29, 2016 through December 19, 2018. To ensure compliance with emissions regulations, apply the improved software update to the Engine system using the KDS ECU Upgrade function as described in this bulletin. For confirmation that the latest reflash has been applied to a vehicle you are working on, verify the ROM ID using the table on pages 3-4 of this bulletin. Before conducting the procedure, verify the vehicle is included in the list of affected VINs.



Kia Diagnostic System (KDS)

NOTICE

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service → Warranty Coverage → Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

ECU Upgrade Procedure:

To correct this condition, the ECU should be reprogrammed using the KDS download, as described in this bulletin.

Upgrade Event Name
636. PS Nu 2.0GDI SULEV EMISSION LOGIC IMPROVEMENT (17~19MY)


NOTICE

- Confirm a fully charged battery (12.3 volts or higher is necessary) is used or utilize a fully charged jump starter box connected to the battery.
- **Ensure the KDS is sufficiently charged at 60% or higher prior to reflash.**
- All ECU upgrades must be performed with the ignition set to the 'ON' position unless otherwise stated.
- **Damaged VCI II units should not be used and promptly replaced.**
- Be careful not to disconnect the VCI-II connected to the vehicle during the ECU upgrade procedure.
- **DO NOT start the engine during ECU upgrade.**
- DO NOT turn the ignition key 'OFF' or interrupt the power supply during ECU upgrade.
- **When the ECU upgrade is completed, turn the ignition 'OFF' and wait 10 seconds before starting the engine.**
- ONLY use approved ECU upgrade software designated for the correct application.

IMPORTANT

It is recommended to ALWAYS check the Electronic Parts Catalog (EPC) to locate the ECU Part Number respective to Auto/Manual Mode ROM IDs. DO NOT reference the parts label affixed to the ECU.

NOTICE


Before attempting an ECU upgrade on any Kia model, make sure to first determine whether the applicable model is equipped with an immobilizer  security system. Failure to follow proper procedures may cause the PCM to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback.

SUBJECT:

NU 2.0L GDI SULEV ECU EMISSIONS LOGIC IMPROVEMENT (SC251)

ROM ID INFORMATION TABLE:

Upgrade Event #636

Model Year	TM	EM	SCC	Wheel Size	IMMO 	ECU P/No.	ROM ID	
							Previous	New
17MY	A/T	SULEV	-	16/17 inch	Yes	39131 2EHB2	GGPS HNSAQS00C00 GGPS HNSAQK00C00	GGPS HNSAQK01C00
					No	39133 2EHB2	GGPS HNSAPS00C00 GGPS HNSAPK00C00	GGPS HNSAPK01C00
				18 inch	Yes	39131 2EHB5	GGPS HNSAQSRO0C00 GGPS HNSAQKRO0C00	GGPS HNSAQKR1C00
					No	39133 2EHB5	GGPS HNSAPSR0C00 GGPS HNSAPKRO0C00	GGPS HNSAPKR1C00
18MY				16/17 inch	Yes	39131 2EHB7	GGPS INSAQS00C00 GGPS INSAQS01C00 GGPS INSAQS02C00 GGPS INSAQS03C00 GGPS INSAQK03C00	GGPS INSAQK04C00
					No	39133 2EHB7	GGPS INSAPS00C00 GGPS INSAPS01C00 GGPS INSAPS02C00 GGPS INSAPS03C00 GGPS INSAPK03C00	GGPS INSAPK04C00
				18 inch	Yes	39131 2EHB9	GGPS INSAQSRO0C00 GGPS INSAQSR1C00 GGPS INSAQSR2C00 GGPS INSAQSR3C00 GGPS INSAQKR3C00	GGPS INSAQKR4C00
					No	39133 2EHB9	GGPS INSAPSR0C00 GGPS INSAPSR1C00 GGPS INSAPSR2C00 GGPS INSAPSR3C00 GGPS INSAPKR3C00	GGPS INSAPKR4C00

To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ECM ROM ID and reference the Information Table as necessary.



SUBJECT:

NU 2.0L GDI SULEV ECU EMISSIONS LOGIC IMPROVEMENT (SC251)

Model Year	TM	EM	SCC	Wheel Size	IMMO 	ECU P/No.	ROM ID									
							Previous	New								
19MY	A/T	SULEV	-SCC	16/17 inch	Yes	39131 2EHC7	GGPS JNSAQS00C00 GGPS JNSAQS01C00 GGPS JNSAQS02C00 GGPS JNSAQK02C00	GGPS JNSAQK03C00								
					No	39133 2EHC7	GGPS JNSAPS00C00 GGPS JNSAPS01C00 GGPS JNSAPS02C00 GGPS JNSAPK02C00	GGPS JNSAPK03C00								
				18 inch	Yes	39131 2EHC9	GGPS JNSAQRS0C00 GGPS JNSAQRS1C00 GGPS JNSAQRS2C00 GGPS JNSAQKR2C00	GGPS JNSAQKR3C00								
					No	39133 2EHC9	GGPS JNSAPSR0C00 GGPS JNSAPSR1C00 GGPS JNSAPSR2C00 GGPS JNSAPKR2C00	GGPS JNSAPKR3C00								
				16/17 inch	Yes	39131 2EHD7	GGPS JNSAQS00C01 GGPS JNSAQS01C01 GGPS JNSAQK01C01	GGPS JNSAQK02C01								
					No	39133 2EHD7	GGPS JNSAPS00C01 GGPS JNSAPS01C01 GGPS JNSAPK01C01	GGPS JNSAPK02C01								
			18 inch	Yes	39131 2EHD9	GGPS JNSAQRS0C01 GGPS JNSAQRS1C01 GGPS JNSAQKR1C01	GGPS JNSAQKR2C01									
				No	39133 2EHD9	GGPS JNSAPSR0C01 GGPS JNSAPSR1C01 GGPS JNSAPKR1C01	GGPS JNSAPKR2C01									
			+SCC													
												16/17 inch	Yes	39131 2EHD7	GGPS JNSAQS00C01 GGPS JNSAQS01C01 GGPS JNSAQK01C01	GGPS JNSAQK02C01
													No	39133 2EHD7	GGPS JNSAPS00C01 GGPS JNSAPS01C01 GGPS JNSAPK01C01	GGPS JNSAPK02C01
												18 inch	Yes	39131 2EHD9	GGPS JNSAQRS0C01 GGPS JNSAQRS1C01 GGPS JNSAQKR1C01	GGPS JNSAQKR2C01
No	39133 2EHD9	GGPS JNSAPSR0C01 GGPS JNSAPSR1C01 GGPS JNSAPKR1C01											GGPS JNSAPKR2C01			

To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ECM ROM ID and reference the Information Table as necessary.

SUBJECT:

NU 2.0L GDI SULEV ECU EMISSIONS LOGIC IMPROVEMENT (SC251)

NOTICE

Prior to performing the ECU upgrade, be sure to check that the KDS is fully charged.

1. Connect the VCI-II to the OBD-II connector, located under the driver's side of the instrument panel.

NOTICE

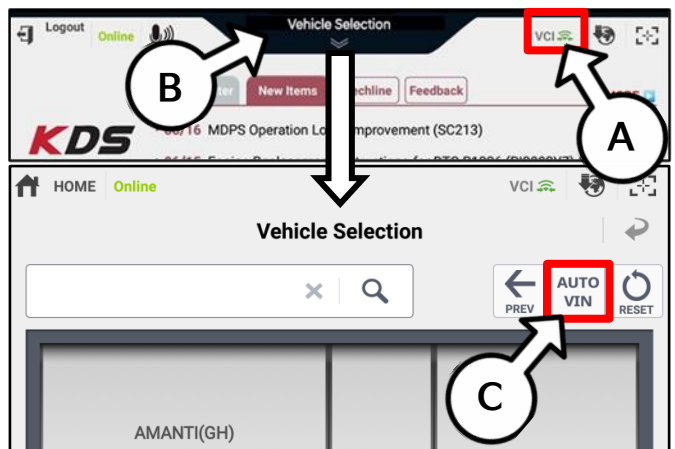
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



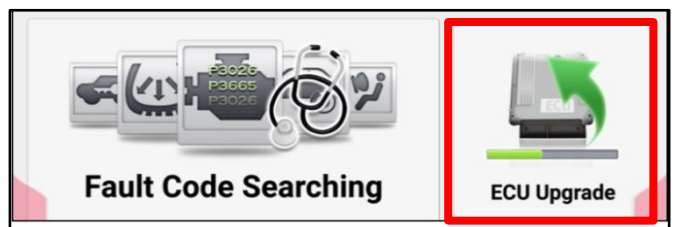
2. With the ignition ON, turn ON the KDS tablet. Select 'KDS' from the home screen.



3. Confirm communication with VCI (A) and then configure the vehicle (B) using the 'AUTO VIN' (C) feature.



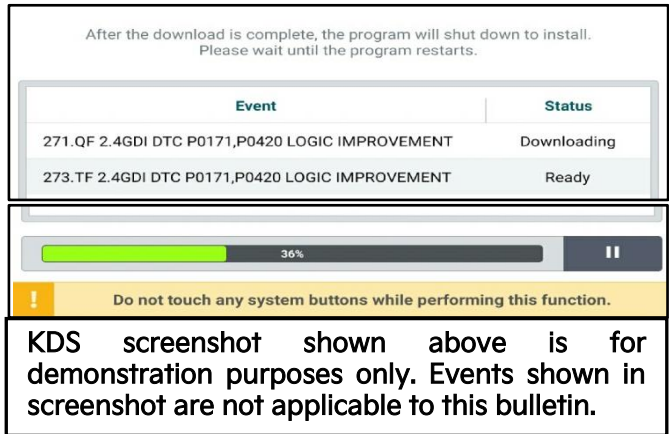
4. Select 'ECU Upgrade'.



- The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #636.

NOTICE

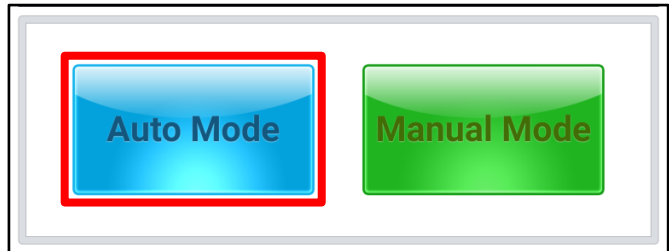
The vehicle must be identified in Vehicle Selection to download an Event for that vehicle.



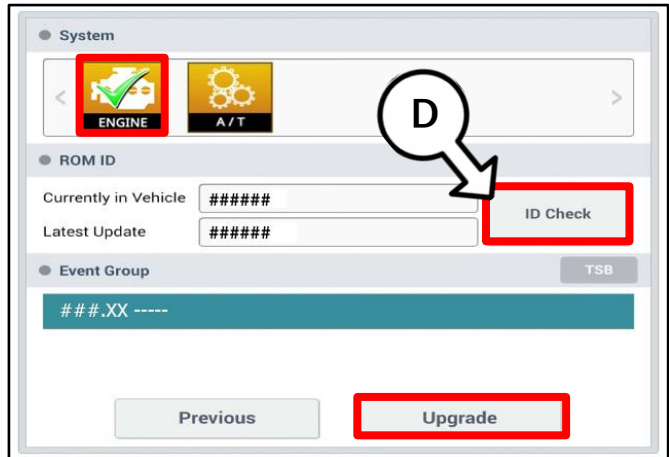
- Select Auto Mode.

CAUTION

Do NOT attempt to perform a Manual Mode upgrade UNLESS Auto Mode fails. Always follow the instructions given on the KDS in either Auto or Manual mode.



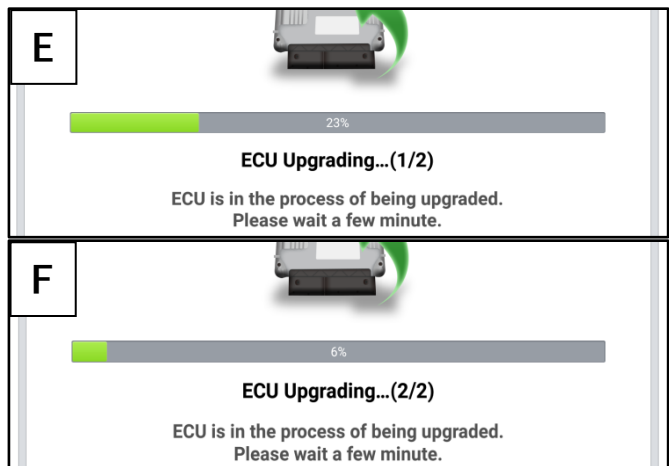
- Select the ENGINE system under the System selection menu. Touch ID Check (D) and confirm that the latest update is available. Select Upgrade Event #636, and select Upgrade to continue.



- The ECU upgrade will begin and the progress of the upgrade will appear on the bar graph. Upgrade part (1/2) (E) will download the upgrade event to the VCI-II. Upgrade part (2/2) (F) will upgrade the ECU.

CAUTION

Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.



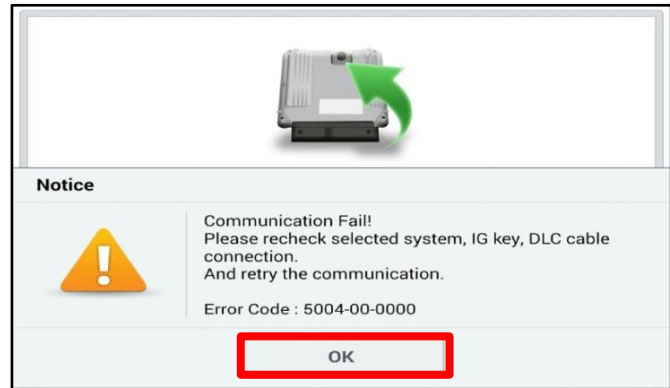
SUBJECT:

NU 2.0L GDI SULEV ECU EMISSIONS LOGIC IMPROVEMENT (SC251)

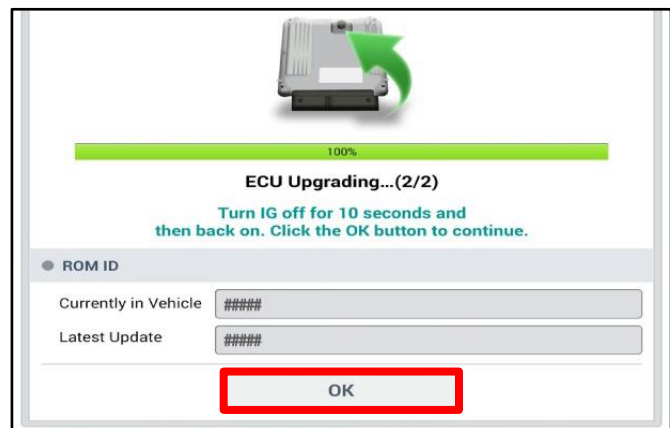
9. If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Select 'OK' and restart the procedure from step 4.

NOTICE

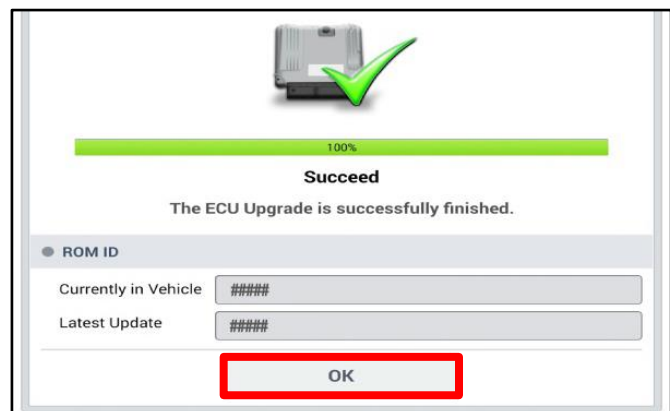
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



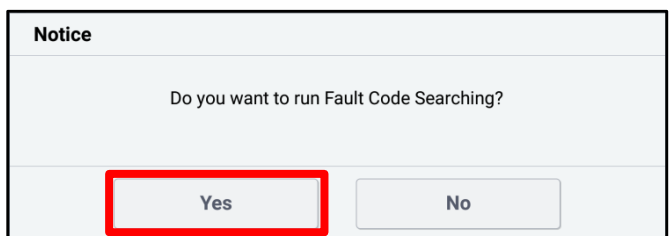
10. When instructed on the KDS, turn the ignition OFF for ten (10) seconds then back on. Select 'OK' to continue.



11. Once the upgrade is complete, select 'OK' to finalize the procedure.



12. When prompted, select 'YES' to check for Diagnostic Trouble Codes (DTC) and erase any DTCs stored such as EPS, ESC, and TPMS that may have been set during the upgrade.



13. Start the engine to confirm normal operation of the vehicle.

Manual Upgrade Procedure:**NOTICE**

The manual upgrade should ONLY be performed if the automatic upgrade fails.

If the automatic upgrade fails, turn the ignition 'OFF' for about 10 seconds then place it back in the 'ON' position to reset the control unit BEFORE performing manual upgrade.

See table below for 'Manual Mode' passwords.

Manual Mode ECU Upgrade Passwords

Menu	Password
PS Nu 2.0GDI SULEV 17MY 16/17inch -IMMO : 39133-2EHB2	3322
PS Nu 2.0GDI SULEV 17MY 16/17inch +IMMO/SMK : 39131-2EHB2	3122
PS Nu 2.0GDI SULEV 17MY 18inch -IMMO : 39133-2EHB5	3325
PS Nu 2.0GDI SULEV 17MY 18inch +IMMO/SMK : 39131-2EHB5	3125
PS Nu 2.0GDI SULEV 18MY 16/17inch -IMMO : 39133-2EHB7	3327
PS Nu 2.0GDI SULEV 18MY 16/17inch +IMMO/SMK : 39131-2EHB7	3127
PS Nu 2.0GDI SULEV 18MY 18inch -IMMO : 39133-2EHB9	3329
PS Nu 2.0GDI SULEV 18MY 18inch +IMMO/SMK : 39131-2EHB9	3129
PS Nu 2.0GDI SULEV 19MY 16/17inch -IMMO -SCC : 39133-2EHC7	3328
PS Nu 2.0GDI SULEV 19MY 16/17inch +IMMO/SMK -SCC : 39131-2EHC7	3128
PS Nu 2.0GDI SULEV 19MY 18inch -IMMO -SCC : 39133-2EHC9	3330
PS Nu 2.0GDI SULEV 19MY 18inch +IMMO/SMK -SCC : 39131-2EHC9	3130
PS Nu 2.0GDI SULEV 19MY 16/17inch -IMMO +SCC : 39133-2EHD7	3329
PS Nu 2.0GDI SULEV 19MY 16/17inch +IMMO/SMK +SCC : 39131-2EHD7	3131
PS Nu 2.0GDI SULEV 19MY 18inch -IMMO +SCC : 39133-2EHD9	3331
PS Nu 2.0GDI SULEV 19MY 18inch +IMMO/SMK +SCC : 39131-2EHD9	3132

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **ENGINE** system under the System selection menu. Select **Upgrade Event #636** and select **Upgrade** to continue.
3. Select the appropriate control unit part number with reference to the ROM ID Information Table on pages 3-4, and select **OK**.
4. Enter the appropriate password from the Manual Mode password table above and select **OK**.
5. The upgrade will begin and the progress of the upgrade will appear on the bar graph.
6. When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Select **OK**.
7. Once the upgrade is complete, select **OK** to finalize the procedure.
8. When prompted, select **YES** to check for Diagnostic Trouble Codes (DTC) and erase any DTCs stored such as EPS, ESC, and TPMS that may have been set during the upgrade.
9. Start the engine to confirm proper operation of the vehicle.

SUBJECT:

NU 2.0L GDI SULEV ECU EMISSIONS LOGIC IMPROVEMENT (SC251)**ATTENTION: THE PROOF OF CORRECTION CARD AND CAMPAIGN COMPLETION STICKER ARE RESTRICTED ONLY TO DEALERS IN THE FOLLOWING STATES:**

California, Connecticut, Delaware, Massachusetts, Maine, Maryland, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington. See Parts Information below to order the Proof of Correction Card and Campaign Completion Label from the PDC.

VEHICLE EMISSION RECALL - PROOF OF CORRECTION CARD

A Vehicle Emission Recall - Proof of Correction card must be filled out for all vehicles registered in California, Connecticut, Delaware, Massachusetts, Maine, Maryland, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington. Residents of these states, who own an affected vehicle, will be required to possess a Vehicle Emission Recall - Proof of Correction card as evidence of voluntary service campaign completion, when they apply for vehicle registration renewal.

WHAT TO DO WITH THE CARD:

The Vehicle Emission Recall - Proof of Correction card must be completed by the Dealership's Service Manager using a permanent ink pen. A fine point pen is recommended. When filling in the information, copy the information directly from the vehicle, not the repair order. **ALL INFORMATION MUST BE PRINTED AND NEAT.**

NOTE: DO NOT COMPLETE THE CARD UNLESS THE SERVICE CAMPAIGN WORK IS COMPLETED.

The copy of the card shown below indicates the areas to be filled in. Each area must be filled in. The completed card should be given to the owner of the vehicle upon completion of the Campaign and placement of the Campaign Completion Label outlined below.

Vehicle Emission Recall - Proof of Correction				
License Number	Make	Year Model	Body Type	Vehicle Identification Number
	Kia America, Inc.			
Manufacturer		Recall Number SC251		
The above described vehicle has been repaired, modified and/or equipped with new emission control devices to meet applicable California Emission Control Laws.				
Dealer's Name		Address, City, State and Zip		
Dealership's Authorized Signature				
X				
Return this certificate to DMV <u>only</u> when required - otherwise retain for your records.				
UT161 SC251				

FILLING OUT AND APPLYING THE CAMPAIGN COMPLETION LABEL (CA and S.177 STATES ONLY):

The dealer must fill in the Dealer Code and Date information fields on the Campaign Completion Label. Once complete, affix the campaign completion label under the hood of the vehicle, as shown below.

CA and S.177 States Only: Apply SC251 Campaign Completion Label onto the body in the area next to the shock tower, as shown. **NOTE: Be sure to clean the mounting surface to ensure proper label adhesion.**



SUBJECT: NU 2.0L GDI SULEV ECU EMISSIONS LOGIC IMPROVEMENT (SC251)



AFFECTED VEHICLE RANGE:

Model	Production Date Range
Soul (PS)	July 29, 2016 to December 19, 2018

REQUIRED TOOL:

Tool Name	Figure	Comments
KDS		Kia Diagnostic System

REQUIRED PART:

Part Name	Part Number	Figure	Qty.
Campaign Completion Label	UT160 SC251*		1
Vehicle Emission Recall Proof of Correction Card	UT161 SC251*		1

*Completion Label and Proof of Correction Card only required for vehicles registered in CA, CT, DE, MA, MD, ME, NJ, NY, OR, PA, RI, VT, and WA "States" only.

WARRANTY INFORMATION:

N Code: N99 C Code: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
R	39131 2EHBO	0	(SC251) ECU Logic Improvement for Emissions	220124R0	0.3 M/H	N/A	0

NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SC251** when accessing the WebDCS system.

